P. Burr

1638

CRF Errors Corrected by the STIC Systems Branch

CRF Processing Date: 9/8/2002

Serial Number: 09/289,346A ENTERED

Edited by:

Verified by: (STIC staff)

RECEIVED
SEP 14 2002
TECH CENTER 1600/2900

- ☐ Changed a file from non-ASCII to ASCII
- ☐ Changed the margins in cases where the sequence text was "wrapped" down to the next line.
- ☐ Edited a format error in the Current Application Data section, specifically: _____
- ☐ Edited the Current Application Data section with the actual current number. The number inputted by the applicant was ☐ the prior application data; or ☐ other _____.
- ☐ Added the mandatory heading and subheadings for "Current Application Data".
- ☐ Edited the "Number of Sequences" field. The applicant spelled out a number instead of using an integer.
- ☐ Changed the spelling of a mandatory field (the headings or subheadings), specifically: _____
- ☐ Corrected the SEQ ID NO when obviously incorrect. The sequence numbers that were edited were: _____
- ☐ Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited: _____
- ☐ Corrected subheading placement. All responses must be on the same line as each subheading. If the applicant placed a response below the subheading, this was moved to its appropriate place.
- ☐ Inserted colons after headings/subheadings. Headings edited included: _____
- ☐ Deleted extra, invalid, headings used by an applicant, specifically: _____
- ☐ Deleted: ☐ non-ASCII "garbage" at the beginning/end of files; ☐ secretary initials/filename at end of file; ☐ page numbers throughout text; ☐ other invalid text, such as _____.
- ☐ Inserted mandatory headings, specifically: _____
- ☐ Corrected an obvious error in the response, specifically: _____
- ☐ Edited identifiers where upper case is used but lower case is required, or vice versa.
- ☐ Corrected an error in the Number of Sequences field, specifically: _____
- ☐ A "Hard Page Break" code was inserted by the applicant. All occurrences had to be deleted.
- ☐ Deleted ***ending*** stop codon in amino acid sequences and adjusted the "(A)Length:" field accordingly (error due to a PatentIn bug). Sequences corrected: _____
- ☑ Other: Seqs 2, 4, 5-7, 9-10 — moved L2237 response up one line and added L2237 to beginning of next line.

***Examiner: The above corrections must be communicated to the applicant in the first Office Action. DO NOT send a copy of this form.**

3/1/95

1638

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/289,346A

DATE: 09/08/2000
TIME: 12:13:02

Input Set : A:\5051-458.app
Output Set: N:\CRF3\09082000\I289346A.raw

Does Not Comply
Corrected Diskette Needed

3 <110> APPLICANT: Hanley-Bowdoin, Linda
4 Orozco, Beverly M.
5 Kong, Ling-Jie
6 Gruissem, Wilhelm
8 <120> TITLE OF INVENTION: GEMINIVIRUS RESISTANT TRANSGENIC PLANTS
10 <130> FILE REFERENCE: Hanley-Bowdoin et al.
12 <140> CURRENT APPLICATION NUMBER: 09/289,346A
13 <141> CURRENT FILING DATE: 1999-04-09
15 <150> PRIOR APPLICATION NUMBER: 60/125,004
16 <151> PRIOR FILING DATE: 1999-03-18
18 <160> NUMBER OF SEQ ID NOS: 16
20 <170> SOFTWARE: PatentIn Ver. 2.1

ERRORED SEQUENCES

44 <210> SEQ ID NO: 2
45 <211> LENGTH: 70
46 <212> TYPE: PRT
47 <213> ORGANISM: Tomato golden mosaic virus
49 <220> FEATURE:
50 <221> NAME/KEY: VARIANT
51 <222> LOCATION: (12)..(15)
52 <223> OTHER INFORMATION: Description of Artificial Sequence: Fragment of
53 TGMV Rep Protein (aa 110-179) with alanine
E--> 54 replacement (RSAR125->AAAA125).
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58 1 5 10 15
60 Gly Cys Gln Thr Ser Asn Asp Ala Ala Ala Glu Ala Leu Asn Ala Ser
61 20 25 30
63 Ser Lys Glu Glu Ala Leu Gln Ile Ile Arg Glu Lys Ile Pro Glu Lys
64 35 40 45
66 Tyr Leu Phe Gln Phe His Asn Leu Asn Ser Asn Leu Asp Arg Ile Phe
67 50 55 60
69 Asp Lys Thr Pro Glu Pro
70 65 70
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103 <211> LENGTH: 70
104 <212> TYPE: PRT
105 <213> ORGANISM: Tomato golden mosaic virus
107 <220> FEATURE:
108 <221> NAME/KEY: VARIANT
109 <222> LOCATION: (42)..(44)
110 <223> OTHER INFORMATION: Description of Artificial sequence: Fragment of
111 TGMV Rep Protein (aa 110-179) with alanine
E--> 112 replacements (REK154->AAA154).

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/289,346A

DATE: 09/08/2000
TIME: 12:13:02

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118 Gly Cys Gln Thr Ser Asn Asp Ala Ala Ala Glu Ala Leu Asn Ala Ser
119              20                  25                  30
121 Ser Lys Glu Glu Ala Leu Gln Ile Ile Ala Ala Ala Ile Pro Glu Lys
122          35                  40                  45
124 Tyr Leu Phe Gln Phe His Asn Leu Asn Ser Asn Leu Asp Arg Ile Phe
125      50                  55                  60
127 Asp Lys Thr Pro Glu Pro
128  65                  70
131 <210> SEQ ID NO: 5
132 <211> LENGTH: 70
133 <212> TYPE: PRT
134 <213> ORGANISM: Tomato golden mosaic virus
136 <220> FEATURE:
137 <221> NAME/KEY: VARIANT
138 <222> LOCATION: (47)..(49)
139 <223> OTHER INFORMATION: Description of Artificial Sequence: Fragment of
140       TGMV Rep Protein (aa 110-179) with alanine
E--> 141 replacements (EKY159->AAA159).
143 <400> SEQUENCE: 5
144 Thr Leu Val Trp Gly Glu Phe Gln Val Asp Gly Arg Ser Ala Arg Gly
145   1               5                  10                  15
147 Gly Cys Gln Thr Ser Asn Asp Ala Ala Ala Glu Ala Leu Asn Ala Ser
148              20                  25                  30
150 Ser Lys Glu Glu Ala Leu Gln Ile Ile Arg Glu Lys Ile Pro Ala Ala
151          35                  40                  45
153 Ala Leu Phe Gln Phe His Asn Leu Asn Ser Asn Leu Asp Arg Ile Phe
154      50                  55                  60
156 Asp Lys Thr Pro Glu Pro
157  65                  70
160 <210> SEQ ID NO: 6
161 <211> LENGTH: 70
162 <212> TYPE: PRT
163 <213> ORGANISM: Tomato golden mosaic virus
165 <220> FEATURE:
166 <221> NAME/KEY: VARIANT
167 <222> LOCATION: (52)..(55)
168 <223> OTHER INFORMATION: Description of Artificial Sequence: Fragment of
169       TGMV Protein (aa 110-179) with alanine
E--> 170 replacements (QFHN165->AFAA165).
172 <400> SEQUENCE: 6
173 Thr Leu Val Trp Gly Glu Phe Gln Val Asp Gly Arg Ser Ala Arg Gly
174   1               5                  10                  15
176 Gly Cys Gln Thr Ser Asn Asp Ala Ala Ala Glu Ala Leu Asn Ala Ser
177              20                  25                  30
179 Ser Lys Glu Glu Ala Leu Gln Ile Ile Arg Glu Lys Ile Pro Glu Lys
180          35                  40                  45
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RAW SEQUENCE LISTING DATE: 09/08/2000
PATENT APPLICATION: US/09/289,346A TIME: 12:13:02

Input Set : A:\5051-458.app
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183      50                  55                  60
185 Asp Lys Thr Pro Glu Pro
186  65                  70
189 <210> SEQ ID NO: 7
190 <211> LENGTH: 70
191 <212> TYPE: PRT
192 <213> ORGANISM: Tomato golden mosaic virus
194 <220> FEATURE:
195 <221> NAME/KEY: VARIANT
196 <222> LOCATION: (59)..(62)
197 <223> OTHER INFORMATION: Description of Artificial Sequence: Fragment of
198       TGMV Rep Protein (aa 110-179) with alanine
E--> 199 replacements (WLDR172->ALAA172).
201 <400> SEQUENCE: 7
202 Thr Leu Val Trp Gly Glu Phe Gln Val Asp Gly Arg Ser Ala Arg Gly
203   1               5                  10                  15
205 Gly Cys Gln Thr Ser Asn Asp Ala Ala Ala Glu Ala Leu Asn Ala Ser
206              20                  25                  30
208 Ser Lys Glu Glu Ala Leu Gln Ile Ile Arg Glu Lys Ile Pro Glu Lys
209          35                  40                  45
211 Tyr Leu Phe Gln Phe His Asn Leu Asn Ser Ala Leu Ala Ala Ile Phe
212      50                  55                  60
214 Asp Lys Thr Pro Glu Pro
215  65                  70
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219 <211> LENGTH: 70
220 <212> TYPE: PRT
221 <213> ORGANISM: Tomato golden mosaic virus
223 <220> FEATURE:
224 <221> NAME/KEY: VARIANT
225 <222> LOCATION: (7)..(8)
226 <223> OTHER INFORMATION: Description of Artificial Sequence: Fragment of
227       TGMV Rep Protein (aa 110-179) with alanine
E--> 228 replacements (FQ118->AA118).
230 <400> SEQUENCE: 8
231 Thr Leu Val Trp Gly Glu Ala Ala Val Asp Gly Arg Ser Ala Arg Gly
232   1               5                  10                  15
234 Gly Cys Gln Thr Ser Asn Asp Ala Ala Ala Glu Ala Leu Asn Ala Ser
235              20                  25                  30
237 Ser Lys Glu Glu Ala Leu Gln Ile Ile Arg Glu Lys Ile Pro Glu Lys
238          35                  40                  45
240 Tyr Leu Phe Gln Phe His Asn Leu Asn Ser Asn Leu Asp Arg Ile Phe
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243 Asp Lys Thr Pro Glu Pro
244  65                  70
247 <210> SEQ ID NO: 9
248 <211> LENGTH: 70
249 <212> TYPE: PRT
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RAW SEQUENCE LISTING DATE: 09/08/2000
PATENT APPLICATION: US/09/289,346A TIME: 12:13:02

Input Set : A:\5051-458.app
Output Set: N:\CRF3\09082000\I289346A.raw

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252 <220> FEATURE:
253 <221> NAME/KEY: VARIANT
254 <222> LOCATION: (10)
255 <223> OTHER INFORMATION: Description of Artificial Sequence: Fragment of
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259 <400> SEQUENCE: 9
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261 1 5 10 15
263 Gly Cys Gln Thr Ser Asn Asp Ala Ala Ala Glu Ala Leu Asn Ala Ser
264 20 25 30
266 Ser Lys Glu Glu Ala Leu Gln Ile Ile Arg Glu Lys Ile Pro Glu Lys
267 35 40 45
269 Tyr Leu Phe Gln Phe His Asn Leu Asn Ser Asn Leu Asp Arg Ile Phe
270 50 55 60
272 Asp Lys Thr Pro Glu Pro
273 65 70
276 <210> SEQ ID NO: 10
277 <211> LENGTH: 70
278 <212> TYPE: PRT
279 <213> ORGANISM: Tomato golden mosaic virus
281 <220> FEATURE:
282 <221> NAME/KEY: VARIANT
283 <222> LOCATION: (24)..(26)
284 <223> OTHER INFORMATION: Description of Artificial Sequence: Fragment of
285 TGMV Rep Protein (aa 110-179) with leucine
E--> 286 replacements (AAA136->LLL136).
288 <400> SEQUENCE: 10
289 Thr Leu Val Trp Gly Glu Phe Gln Val Asp Gly Arg Ser Ala Arg Gly
290 1 5 10 15
292 Gly Cys Gln Thr Ser Asn Asp Leu Leu Leu Glu Ala Leu Asn Ala Ser
293 20 25 30
295 Ser Lys Glu Glu Ala Leu Gln Ile Ile Arg Glu Lys Ile Pro Glu Lys
296 35 40 45
298 Tyr Leu Phe Gln Phe His Asn Leu Asn Ser Asn Leu Asp Arg Ile Phe
299 50 55 60
301 Asp Lys Thr Pro Glu Pro
302 65 70

VERIFICATION SUMMARY DATE: 09/08/2000
PATENT APPLICATION: US/09/289,346A TIME: 12:13:03

Input Set : A:\5051-458.app
Output Set: N:\CRF3\09082000\I289346A.raw

L:54 M:250 E: Invalid Numeric Identifier, INVALID IDENTIFIER
L:112 M:250 E: Invalid Numeric Identifier, INVALID IDENTIFIER
L:141 M:250 E: Invalid Numeric Identifier, INVALID IDENTIFIER
L:170 M:250 E: Invalid Numeric Identifier, INVALID IDENTIFIER
L:199 M:250 E: Invalid Numeric Identifier, INVALID IDENTIFIER
L:228 M:250 E: Invalid Numeric Identifier, INVALID IDENTIFIER
L:257 M:250 E: Invalid Numeric Identifier, INVALID IDENTIFIER
L:286 M:250 E: Invalid Numeric Identifier, INVALID IDENTIFIER
L:382 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11

RAW SEQUENCE LISTING DATE: 09/12/2000
PATENT APPLICATION: US/09/289,346A TIME: 12:29:06

Input Set : A:\Pto.amc
Output Set: N:\CRF3\09122000\I289346A.raw

<110> APPLICANT: Hanley-Bowdoin, Linda
Orozco, Beverly M.
Kong, Ling-Jie
Gruissem, Wilhelm
<120> TITLE OF INVENTION: GEMINIVIRUS RESISTANT TRANSGENIC PLANTS
<130> FILE REFERENCE: Hanley-Bowdoin et al.
<140> CURRENT APPLICATION NUMBER: 09/289,346A
<141> CURRENT FILING DATE: 1999-04-09
<150> PRIOR APPLICATION NUMBER: 60/125,004
<151> PRIOR FILING DATE: 1999-03-18
<160> NUMBER OF SEQ ID NOS: 16
<170> SOFTWARE: PatentIn Ver. 2.1
<210> SEQ ID NO: 1
<211> LENGTH: 70
<212> TYPE: PRT
<213> ORGANISM: Tomato golden mosaic virus
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 1               5                  10                  15
Gly Cys Gln Thr Ser Asn Asp Ala Ala Ala Glu Ala Leu Asn Ala Ser
            20                  25                  30
Ser Lys Glu Glu Ala Leu Gln Ile Ile Arg Glu Lys Ile Pro Glu Lys
        35                  40                  45
Tyr Leu Phe Gln Phe His Asn Leu Asn Ser Asn Leu Asp Arg Ile Phe
    50                  55                  60
Asp Lys Thr Pro Glu Pro
65                  70
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<210> SEQ ID NO: 2
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<213> ORGANISM: Tomato golden mosaic virus
<220> FEATURE:
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<222> LOCATION: (12)..(15)
<223> OTHER INFORMATION: Description of Artificial Sequence:Fragment of TGMV Rep
<223> OTHER INFORMATION: Protein (aa 110-179) with alanine
<223> OTHER INFORMATION: replacement (RSAR125->AAAA125).
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 1               5                  10                  15
Gly Cys Gln Thr Ser Asn Asp Ala Ala Ala Glu Ala Leu Asn Ala Ser
            20                  25                  30
Ser Lys Glu Glu Ala Leu Gln Ile Ile Arg Glu Lys Ile Pro Glu Lys
        35                  40                  45
Tyr Leu Phe Gln Phe His Asn Leu Asn Ser Asn Leu Asp Arg Ile Phe
    50                  55                  60
Asp Lys Thr Pro Glu Pro
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RAW SEQUENCE LISTING DATE: 09/12/2000
PATENT APPLICATION: US/09/289,346A TIME: 12:29:06

Input Set : A:\Pto.amc
Output Set: N:\CRF3\09122000\I289346A.raw

68 65 70
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72 <211> LENGTH: 70
73 <212> TYPE: PRT
74 <213> ORGANISM: Tomato golden mosaic virus
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77 <221> NAME/KEY: VARIANT
78 <222> LOCATION: (27)..(36)
79 <223> OTHER INFORMATION: Description of Artificial Sequence: Fragment of
80 <223> OTHER INFORMATION: TGMV Rep Protein (aa 110-179) with alanine
81 <223> OTHER INFORMATION: replacements (EALNASSKEE->AALAASSAAA)
83 <400> SEQUENCE: 3
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85 1 5 10 15
87 Gly Cys Gln Thr Ser Asn Asp Ala Ala Ala Ala Ala Leu Ala Ala Ser
88 20 25 30
90 Ser Ala Ala Ala Ala Leu Gln Ile Ile Arg Glu Lys Ile Pro Glu Lys
91 35 40 45
93 Tyr Leu Phe Gln Phe His Asn Leu Asn Ser Asn Leu Asp Arg Ile Phe
94 50 55 60
96 Asp Lys Thr Pro Glu Pro
97 65 70
100 <210> SEQ ID NO: 4
101 <211> LENGTH: 70
102 <212> TYPE: PRT
103 <213> ORGANISM: Tomato golden mosaic virus
105 <220> FEATURE:
106 <221> NAME/KEY: VARIANT
107 <222> LOCATION: (42)..(44)
108 <223> OTHER INFORMATION: Description of Artificial sequence: Fragment of
109 <223> OTHER INFORMATION: TGMV Rep Protein (aa 110-179) with alanine
110 <223> OTHER INFORMATION: replacements (REK154->AAA154).
112 <400> SEQUENCE: 4
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114 1 5 10 15
116 Gly Cys Gln Thr Ser Asn Asp Ala Ala Ala Glu Ala Leu Asn Ala Ser
117 20 25 30
119 Ser Lys Glu Glu Ala Leu Gln Ile Ile Ala Ala Ala Ile Pro Glu Lys
120 35 40 45
122 Tyr Leu Phe Gln Phe His Asn Leu Asn Ser Asn Leu Asp Arg Ile Phe
123 50 55 60
125 Asp Lys Thr Pro Glu Pro
126 65 70
129 <210> SEQ ID NO: 5
130 <211> LENGTH: 70
131 <212> TYPE: PRT
132 <213> ORGANISM: Tomato golden mosaic virus
134 <220> FEATURE:
135 <221> NAME/KEY: VARIANT

RAW SEQUENCE LISTING DATE: 09/12/2000
PATENT APPLICATION: US/09/289,346A TIME: 12:29:06

Input Set : A:\Pto.amc
Output Set: N:\CRF3\09122000\I289346A.raw

<222> LOCATION: (47)..(49)
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<223> OTHER INFORMATION: replacements (EKY159->AAA159).
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             20                  25                  30
Ser Lys Glu Glu Ala Leu Gln Ile Ile Arg Glu Lys Ile Pro Ala Ala
         35                  40                  45
Ala Leu Phe Gln Phe His Asn Leu Asn Ser Asn Leu Asp Arg Ile Phe
     50                  55                  60
Asp Lys Thr Pro Glu Pro
 65                  70
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<223> OTHER INFORMATION: replacements (QFHN165->AFAA165).
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  1               5                  10                  15
Gly Cys Gln Thr Ser Asn Asp Ala Ala Ala Glu Ala Leu Asn Ala Ser
             20                  25                  30
Ser Lys Glu Glu Ala Leu Gln Ile Ile Arg Glu Lys Ile Pro Glu Lys
         35                  40                  45
Tyr Leu Phe Ala Phe Ala Ala Leu Asn Ser Asn Leu Asp Arg Ile Phe
     50                  55                  60
Asp Lys Thr Pro Glu Pro
 65                  70
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<212> TYPE: PRT
<213> ORGANISM: Tomato golden mosaic virus
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<222> LOCATION: (59)..(62)
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<223> OTHER INFORMATION: replacements (NLDR172->ALAA172).
<400> SEQUENCE: 7

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RAW SEQUENCE LISTING DATE: 09/12/2000
PATENT APPLICATION: US/09/289,346A TIME: 12:29:06

Input Set : A:\Pto.amc
Output Set: N:\CRF3\09122000\I289346A.raw

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204              20                  25                  30
206 Ser Lys Glu Glu Ala Leu Gln Ile Ile Arg Glu Lys Ile Pro Glu Lys
207          35                  40                  45
209 Tyr Leu Phe Gln Phe His Asn Leu Asn Ser Ala Leu Ala Ala Ile Phe
210      50                  55                  60
212 Asp Lys Thr Pro Glu Pro
213  65                  70
216 <210> SEQ ID NO: 8
217 <211> LENGTH: 70
218 <212> TYPE: PRT
219 <213> ORGANISM: Tomato golden mosaic virus
221 <220> FEATURE:
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223 <222> LOCATION: (7)..(8)
224 <223> OTHER INFORMATION: Description of Artificial Sequence: Fragment of
225 <223> OTHER INFORMATION: TGMV Rep Protein (aa 110-179) with alanine
226 <223> OTHER INFORMATION: replacements (FQ118->AA118).
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232 Gly Cys Gln Thr Ser Asn Asp Ala Ala Ala Glu Ala Leu Asn Ala Ser
233              20                  25                  30
235 Ser Lys Glu Glu Ala Leu Gln Ile Ile Arg Glu Lys Ile Pro Glu Lys
236          35                  40                  45
238 Tyr Leu Phe Gln Phe His Asn Leu Asn Ser Asn Leu Asp Arg Ile Phe
239      50                  55                  60
241 Asp Lys Thr Pro Glu Pro
242  65                  70
245 <210> SEQ ID NO: 9
246 <211> LENGTH: 70
247 <212> TYPE: PRT
248 <213> ORGANISM: Tomato golden mosaic virus
250 <220> FEATURE:
251 <221> NAME/KEY: VARIANT
252 <222> LOCATION: (10)
253 <223> OTHER INFORMATION: Description of Artificial Sequence: Fragment of
254 <223> OTHER INFORMATION: TGMV Rep Protein (aa 110-179) with alanine
255 <223> OTHER INFORMATION: replacement (D120->A120)
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261 Gly Cys Gln Thr Ser Asn Asp Ala Ala Ala Glu Ala Leu Asn Ala Ser
262              20                  25                  30
264 Ser Lys Glu Glu Ala Leu Gln Ile Ile Arg Glu Lys Ile Pro Glu Lys
265          35                  40                  45
267 Tyr Leu Phe Gln Phe His Asn Leu Asn Ser Asn Leu Asp Arg Ile Phe
268      50                  55                  60
270 Asp Lys Thr Pro Glu Pro
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RAW SEQUENCE LISTING DATE: 09/12/2000
PATENT APPLICATION: US/09/289,346A TIME: 12:29:07

Input Set : A:\Pto.amc
Output Set: N:\CRF3\09122000\I289346A.raw


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275 <211> LENGTH: 70
276 <212> TYPE: PRT
277 <213> ORGANISM: Tomato golden mosaic virus
279 <220> FEATURE:
280 <221> NAME/KEY: VARIANT
281 <222> LOCATION: (24)..(26)
282 <223> OTHER INFORMATION: Description of Artificial Sequence: Fragment of
283 <223> OTHER INFORMATION: TGMV Rep Protein (aa 110-179) with leucine
284 <223> OTHER INFORMATION: replacements (AAA136->LLL136).
286 <400> SEQUENCE: 10
287 Thr Leu Val Trp Gly Glu Phe Gln Val Asp Gly Arg Ser Ala Arg Gly
288   1               5                  10                  15
290 Gly Cys Gln Thr Ser Asn Asp Leu Leu Leu Glu Ala Leu Asn Ala Ser
291              20                  25                  30
293 Ser Lys Glu Glu Ala Leu Gln Ile Ile Arg Glu Lys Ile Pro Glu Lys
294          35                  40                  45
296 Tyr Leu Phe Gln Phe His Asn Leu Asn Ser Asn Leu Asp Arg Ile Phe
297      50                  55                  60
299 Asp Lys Thr Pro Glu Pro
300  65                  70
303 <210> SEQ ID NO: 11
304 <211> LENGTH: 356
305 <212> TYPE: PRT
306 <213> ORGANISM: Tomato golden mosaic virus
308 <220> FEATURE:
309 <221> NAME/KEY: UNSURE
310 <222> LOCATION: (354)
311 <223> OTHER INFORMATION: Unsure about sequence assignment
313 <400> SEQUENCE: 11
314 Met Pro Ser His Pro Arg Phe Gln Ile Asn Ala Lys Asn Tyr Phe Leu
315   1               5                  10                  15
317 Thr Tyr Pro Gln Cys Ser Leu Ser Lys Glu Glu Ser Leu Ser Gln Leu
318              20                  25                  30
320 Gln Ala Leu Asn Thr Pro Ile Asn Lys Lys Phe Ile Lys Ile Cys Arg
321          35                  40                  45
323 Glu Leu His Glu Asp Gly Gln Pro His Leu His Val Leu Ile Gln Phe
324      50                  55                  60
326 Glu Gly Lys Tyr Cys Cys Gln Asn Gln Arg Phe Phe Asp Leu Val Ser
327  65                  70                  75                  80
329 Pro Thr Arg Ser Ala His Phe His Pro Asn Ile Gln Arg Ala Lys Ser
330                  85                  90                  95
332 Ser Ser Asp Val Lys Thr Tyr Ile Asp Lys Asp Gly Asp Thr Leu Val
333             100                 105                 110
335 Trp Gly Glu Phe Gln Val Asp Gly Arg Ser Ala Arg Gly Gly Cys Gln
336         115                 120                 125
338 Thr Ser Asn Asp Ala Ala Ala Glu Ala Leu Asn Ala Ser Ser Lys Glu
339     130                 135                 140
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VERIFICATION SUMMARY DATE: 09/12/2000
PATENT APPLICATION: US/09/289,346A TIME: 12:29:08

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L:380 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11